

A case of development of the parthenogenetic embryo in the ovary of  
Moina macrocopa Straus (Crustacea, Cladocera)

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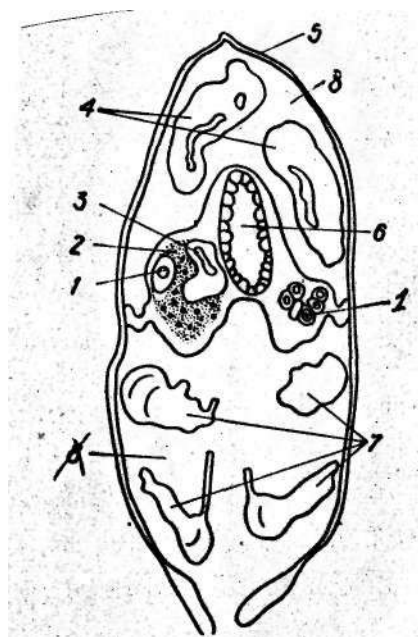
Vest.Zool., Kiev, 4, p86

Translated by J.E.M. Horne

In a survey of histological preparations of several hundreds of  
Moina macrocopa Straus (Moinidae; Goulden, C.E., 1968) , one  
specimen was discovered, in the left ovary of which was found a  
parthenogenetic embryo. Like other embryos, found in the brood pouch,  
it was at the stage preceding the start of pigmentation of the eye.  
The longitudinal axis of the body of the  
embryo discovered in the ovary was parallel to the longitudinal axis of  
the body of the maternal organism, therefore on transverse sections of  
the moina are seen transverse sections of this embryo (figure).  
In this same ovary were discovered two subitaneous eggs which had been  
formed and were already beginning to break down, the same to be cast out  
as also the developing embryo.

The parthenogenetic embryos of moina evolve and grow in the brood pouch  
not only by means of yolk, reserves of which in the egg are small, but  
also by means of the juices of the maternal organism. To these also it  
is possible to explain the breakdown of the eggs for some reason remain-  
ing in the ovary, and the subsequent growth of the embryo in the body  
cavity, Washed by blood, it finds here sufficiently good conditions f  
for growth.

The preparation is held in ZIN AN SSSR as no. 54206.



Transverse section of partheno-  
genetic female of Moina macrocopa

- 1 - ovocyte
- 2 - breaking down subitaneous egg  
in the ovary
- 3 - embryo developing in ovary
- 4 - embryos developing in the  
brood pouch.
- 5 - valve of the shell
- 6 - gut            7 - extremities
- 8 - space of brood pouch

Goulden C.E. 1968. The systematic and evolution of the  
Moinidae. Trans. Amer. Philos. Soc New ser., v.58, pt.6.

### **Notice**

Please note that these translations were produced to assist the scientific staff of the FBA (Freshwater Biological Association) in their research. These translations were done by scientific staff with relevant language skills and not by professional translators.